

IN THE CLAIMS

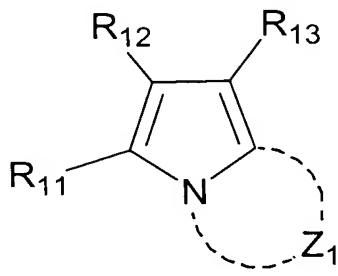
Please amend the claims as follows:

Claim 1 (Currently Amended): An organic thin film transistor comprising:  
at least three terminals consisting of a gate electrode, a source electrode and a drain electrode; and

an insulating layer and an organic semiconductor layer on a substrate, which controls an electric current flowing between the source electrode and the drain electrode by applying an electric voltage across the gate electrode, a distance between the source electrode and the drain electrode being 1  $\mu\text{m}$  to 1mm;

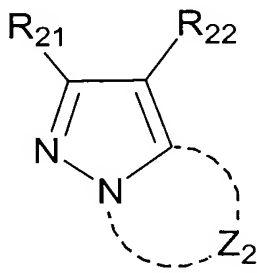
wherein the organic semiconductor layer comprises a heterocyclic compound containing a nitrogen atom formed by condensation between five member rings each having a nitrogen atom at their condensation sites or between a five-member ring and a six-member ring each having a nitrogen atom at their condensation sites, said heterocyclic compound selected from the group consisting of:

( I )



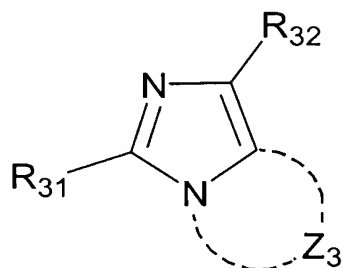
wherein  $R_{11}$ ,  $R_{12}$  and  $R_{13}$  each independently represents a hydrogen atom or a substituent; and  $Z_1$  represents an atomic group forming a five-member ring or a six-member ring;

(II)



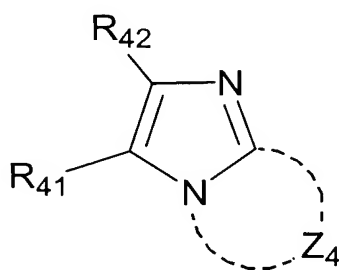
wherein  $R_{21}$  and  $R_{22}$  each independently represents a hydrogen atom or a substituent; and  $Z_2$  represents an atomic group forming a five-member ring or a six-member ring;

(III)



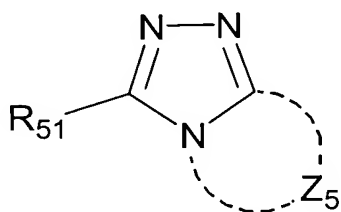
wherein R<sub>31</sub> and R<sub>32</sub> each independently represents a hydrogen atom or a substituent; and Z<sub>3</sub> represents an atomic group forming a five-member ring or a six-member ring;

(IV)



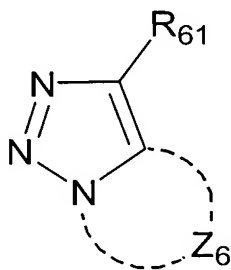
wherein R<sub>41</sub> and R<sub>42</sub> each independently represents a hydrogen atom or a substituent; and Z<sub>4</sub> represents an atomic group forming a 5-member ring or a 6-member ring;

(V)

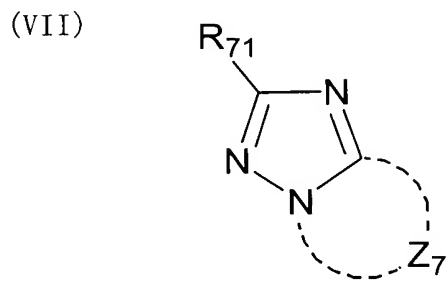


wherein R<sub>51</sub> represents a hydrogen atom or a substituent; and Z<sub>5</sub> represents an atomic group forming a five-member ring or a six-member ring;

(VI)

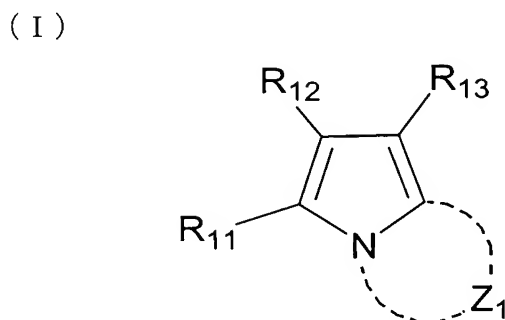


wherein R<sub>61</sub> represents a hydrogen atom or a substituent; and Z<sub>6</sub> represents an atomic group forming a five-member ring or a six-member ring; and



wherein  $R_{71}$  represents a hydrogen atom or a substituent; and  $Z_7$  represents a group forming a five-member ring or a six-member ring.

Claim 2 (Original): The organic thin film transistor according to Claim 1, wherein said heterocyclic compound containing a nitrogen atom is a compound expressed by a following general formula (I):

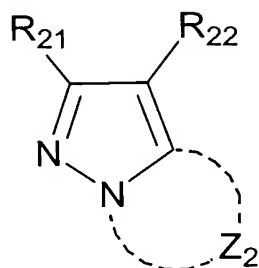


wherein  $R_{11}$ ,  $R_{12}$  and  $R_{13}$  each independently represents a hydrogen atom or a substituent; and

$Z_1$  represents an atomic group forming a five-member ring or a six-member ring.

Claim 3 (Original): The organic thin film transistor according to Claim 1, wherein said heterocyclic compound containing a nitrogen atom is a compound expressed by a following general formula (II):

(II)

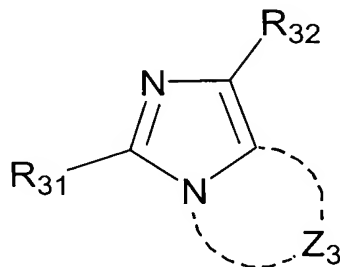


wherein R<sub>21</sub> and R<sub>22</sub> each independently represents a hydrogen atom or a substituent;  
and

Z<sub>2</sub> represents an atomic group forming a five-member ring or a six-member ring.

Claim 4 (Original): The organic thin film transistor according to Claim 1, wherein said heterocyclic compound containing a nitrogen atom is a compound expressed by a following general formula (III):

(III)

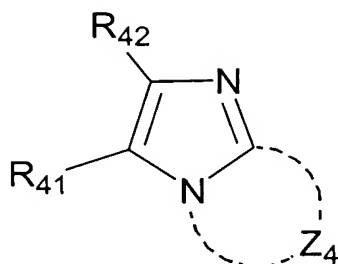


wherein R<sub>31</sub> and R<sub>32</sub> each independently represents a hydrogen atom or a substituent;  
and

Z<sub>3</sub> represents an atomic group forming a five-member ring or a six-member ring.

Claim 5 (Original): The organic thin film transistor according to Claim 1, wherein said heterocyclic compound containing a nitrogen atom is a compound expressed by a following general formula (IV):

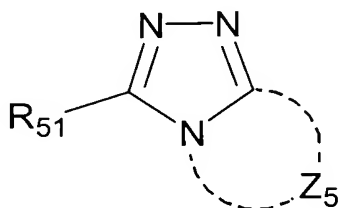
(IV)



wherein R<sub>41</sub> and R<sub>42</sub> each independently represents a hydrogen atom or a substituent;  
and  
Z<sub>4</sub> represents an atomic group forming a 5-member ring or a 6-member ring.

Claim 6 (Original): The organic thin film transistor according to Claim 1, wherein said heterocyclic compound containing a nitrogen atom is a compound expressed by a following general formula (V):

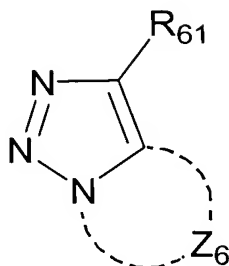
(V)



wherein R<sub>51</sub> represents a hydrogen atom or a substituent; and  
Z<sub>5</sub> represents an atomic group forming a five-member ring or a six-member ring.

Claim 7 (Original): The organic thin film transistor according to Claim 1, wherein said heterocyclic compound containing a nitrogen atom is a compound expressed by a following general formula (VI):

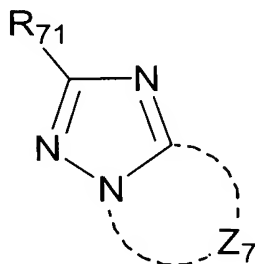
(VI)



wherein R<sub>61</sub> represents a hydrogen atom or a substituent; and  
Z<sub>6</sub> represents an atomic group forming a five-member ring or a six-member ring.

Claim 8 (Original): The organic thin film transistor according to Claim 1, wherein said heterocyclic compound containing a nitrogen atom is a compound expressed by a following general formula (VII):

(VII)



wherein R<sub>71</sub> represents a hydrogen atom or a substituent; and  
Z<sub>7</sub> represents a group forming a five-member ring or a six-member ring.

Claim 9 (Previously Presented): The organic thin film transistor according to Claim 1, wherein the distance between the source electrode and the drain electrode is 5  $\mu\text{m}$  to 1mm.

Claim 10 (Previously Presented): The organic thin film transistor according to Claim 1, wherein the source electrode and the drain electrode are formed on the insulating layer.

Claim 11 (Previously Presented): The organic thin film transistor according to Claim 1, wherein the source electrode and the drain electrode are formed on the organic semiconductor layer.

Claim 12 (Previously Presented): The organic thin film transistor according to Claim 1, wherein the source electrode and the drain electrode are formed on the substrate.

Claim 13 (Previously Presented): The organic thin film transistor according to Claim 1, wherein a field-effect mobility of electrons of the heterocyclic compound is  $1.0 \times 10^{-3} \text{ cm}^2/\text{Vs}$  or more.

Claim 14 (New): The organic thin film transistor according to Claim 1, wherein the source electrode and the drain electrode are juxtaposed on the substrate.

Claim 15 (New): The organic thin film transistor according to Claim 1, wherein the source electrode and the drain electrode are formed in contact with a same plane.

Claim 16 (New): The organic thin film transistor according to Claim 1, comprising a device structure selected from the group consisting of:

(A) the gate electrode, the insulating layer, a pair of the source electrode and the drain electrode and the organic semiconductor layer formed on the substrate in said order;

(B) the gate electrode, the insulating layer, the organic semiconductor layer and a pair of the source electrode and the drain electrode formed on the substrate in said order;

(C) a pair of the source electrode and the drain electrode, the organic semiconductor layer, the insulating layer and the gate electrode formed on the substrate in said order; and

(D) the organic semiconductor layer, a pair of the source electrode and the drain electrode, the insulating layer and the gate electrode formed on the substrate in said order.

Claim 17 (New): The organic thin film transistor according to Claim 1, wherein the source electrode and the drain electrode are in contact with the organic semiconductor layer.